

PTO/SB/08 (08-03)

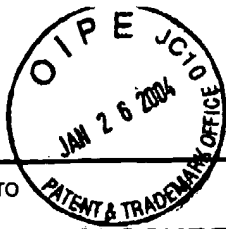
Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	09/966,571	
			Filing Date	September 26, 2001	
			First Named Inventor	Wagner, Peter	
			Art Unit	1641	
			Examiner Name	Nelson C. Yang	
Sheet	1	of	7	Attorney Docket Number	020144-001960US

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
AM	AA	US-4,071,409	01-31-1978	Messing et al.	
	AB	US-4,562,157	12-31-1985	Lowe et al.	
	AC	US-4,690,715	09-01-1987	Allara et al.	
	AD	US-4,722,896	02-02-1988	Kadish et al.	
	AE	US-4,908,112	03-13-1990	Pace	
	AF	US-4,973,493	11-27-1990	Guire	
	AG	US-4,987,032	01-22-1991	Tsutomu et al.	
	AH	US-5,079,600	01-07-1992	Schnur et al.	
	AI	US-5,096,807	03-17-1992	Leaback	
	AJ	US-5,143,854	09-01-1992	Pirung et al.	
	AK	US-5,154,808	10-13-1992	Miyasaka, et al.	
	AL	US-5,160,597	11-03-1992	Colapicchioni et al.	
	AM	US-5,242,828	09-07-1993	Bergstrom et al.	
	AN	US-5,252,743	10-12-1993	Barrett et al.	
	AO	US-5,294,369	03-15-1994	Shigekawa et al.	
	AP	US-5,296,114	03-22-1994	Manz	
	AQ	US-5,304,487	04-19-1994	Widing et al.	
	AR	US-5,342,692	08-30-1994	Ribi	
	AS	US-5,384,261	01-24-1995	Winkler et al.	
	AT	US-5,405,766	04-11-1995	Kallury et al.	
	AU	US-5,405,783	04-11-1995	Pirung et al.	
	AV	US-5,412,087	05-02-1995	McGall et al.	
	AW	US-5,429,708	07-04-1995	Linford et al.	
	AX	US-5,441,876	08-15-1995	Singh	
	AY	US-5,445,934	08-29-1995	Fodor et al.	
	AZ	US-5,472,881	12-05-1995	Beebe et al.	
	BA	US-5,510,270	04-23-1996	Fodor et al.	
	BB	US-5,512,131	04-30-1996	Kumar et al.	
	BC	US-5,512,492	04-30-1996	Herron et al.	
	BD	US-5,514,501	05-07-1996	Tarlov	
	BE	US-5,520,787	05-28-1996	Hanagan et al.	
	BF	US-5,571,410	11-05-1996	Swedberg et al.	
	BG	US-5,593,838	01-14-1997	Zanzucchi et al.	
	BH	US-5,603,351	02-18-1997	Cherukuri et al.	
	BI	US-5,605,662	02-25-1997	Heller et al.	
	BJ	US-5,620,850	04-15-1997	Bamdad et al.	
	BK	US-5,622,826	04-22-1997	Varna	
	BL	US-5,624,711	04-29-1997	Sundberg et al.	
	BM	US-5,629,213	05-13-1997	Komguth et al.	

Examiner Signature	Nelson C. Yang	Date Considered	4/30/04
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		Art Unit	1641
		Examiner Name	Nelson C. Yang
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FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
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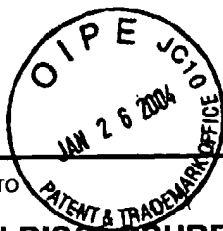
Substitute for form 1449B/PTO		INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Complete If Known	
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		Art Unit	1641		
		Examiner Name	Nelson C. Yang		
		Attorney Docket Number	020144-001960US		
Sheet	4	of	7		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M	EA	Becker et al. "Fabrication of microstructures with high aspect ratios and great structural heights by synchrotron radiation lithography, galvanofarming, and plastic moulding (LIGA process)" Microelectronic Engineering 4:35-56 (1988).	
	EB	Becker et al. "Production of separation -nozzle systems for uranium enrichment by a combination of x-ray lithography and galvanoplastics" Naturwissenschaften 69:520-523 (1982).	
	EC	Cha et al. Expression of fused protein, human interleukin-2 and green fluorescent protein, in insect larvae. Annual Meeting of The American Institute of Chemical Engineers, Los Angeles, CA, Nov. 1997.*	
	ED	Cload et al., "Development of improved tRNAs for in vitro biosynthesis of proteins containing unnatural amino acids," Chemistry and Biology, 3:1033-1038 (1996).	
	EE	Colliod et al. "Oriented and covalent immobilization of target molecules to solid supports" Synthesis and application of a light-activatable and thiol-reactive cross-linking reagent Bioconjugate Chem. 4:528-536 (1993).	
	EF	Condra et al. "In vivo emergence of HIV-1 variants resistant to multiple protease inhibitors" Nature 374:569-571 (1995).	
	EG	Dammer et al., "Specific antigen/antibody interactions measured by force microscopy," Biophysical Journal, 70:2437-2441 (1996).	
	EH	Dawson et al., "Peptide-derived self-assembled monolayers: adsorption of N-stearoyl L-Cysteine methyl ester on gold," Journal of Molecular Recognition, 10:18-25 (1997).	
	EI	Duschl et al., "Surface engineering: optimization of antigen presentation in self-assembled monolayers," Biophysical Journal, 70:1985-1995 (1996).	
	EJ	Dzgoev et al "Microformat imaging ELISA for pesticide determination" Anal. Chem. 68(19):3364 (1996).	
	EK	Ekins "Ligand assays" from electrophoresis to miniaturized microarrays Clin. Chem. 44(9):2015-2030 (1998).	
	EL	Elkins et al. "Multianalyte microspote immunoassay-micromanalytical "compact disk" of the future" Clin. Chem. 37(11):1955-1967 (1991).	
	EM	Ellman et al., "Biosynthetic method for introducing unnatural amino acids site-specifically into proteins," Methods in Enzymology, 202:301-337 (1991).	
	EN	Geohegan et al. "Fluorescence-based continuous assay for the aspartyl protease of human immunodeficiency virus-1" FEBS 262:119-122 (1990).	
	EO	Hegner et al., "Immobilizing DNA on gold via thiol modification for atomic force microscopy imaging in buffer solutions," FEBS, 338(3):452-456 (1993).	
M	EP	Hegner et al., "Modified DNA immobilized on bioreactive self-assembled monolayer on gold for dynamic force microscopy imaging in aqueous buffer solution," J. Vac. Sci. Technol. B, 14(2):1418-1421 (1996).	

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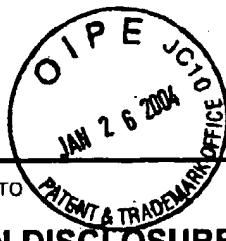
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known			
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Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M	EQ	Hegner et al., "Ultralarge atomically flat template-stripped Au surfaces for scanning probe microscopy," Surface Science, 291:39-46 (1993).	
	ER	Ho et al. "Characterization of human immunodeficiency virus type 1 variants that encode viral proteases with decreased sensitivity to an inhibitor of the viral protease" Journal of Virology 68:2018-2020 (1994).	
	ES	Hochuli et al., "Genetic approach to facilitate purification of recombinant proteins with a novel metal chelate adsorbent," Biotechnology, 6:1321-1325 (1988).	
	ET	Jacobson et al. "Fused quartz substrates for microchip electrophoresis" Anal. Chem. 67:2059-2063.	
	EU	Jones et al. "Microminaturized immunoassays using atomic force microscopy and compositionally patterned antigen arrays" Anal. Chem. 70(7):1223-1241 (1998).	
	EV	Kaplan et al. "Selection of multiple human immunodeficiency virus type 1 variants that encode viral proteases with decreased sensitivity to an inhibitor of the viral inhibitor" Proc. Natl. Acad. Sci. USA 91:5597-5601 (1994).	
	EW	Kemeny. Enzyme-linked immunoassays. In Immuno-Chemistry 1 (eds Johnstone and Turner). pp. 147-175, Nov. 1997.*	
	EX	Korant et al. "The HIV protease and therapies for aids" Adv. in Experimental Med. and Biol 421:279-284 (1997).	
	EY	Kricka "Miniaturization of analytical systems" Clin. Chem. 44(9):2008-2014 (1998).	
	EZ	Lemmo et al., "Characterization of inkjet chemical microdispenser for combinatorial library synthesis," Anal. Chem., 69:543-551 (1997).	
	FA	Linford et al., "Alkyl monolayers on silicon prepared from 1-alkenes and hydrogen-terminated silicon," J. Am. Chem. Soc., 117:3145-3155 ((1995).	
	FB	Loeb et al. "Complete mutagenesis of the HIV-1 protease" Nature 340:397-400 (1989).	
	FC	Louis et al. "Autoprocessing of the HIV-1 protease using purified wild-type and mutated fusion proteins expressed at high levels in Eschericia coli" Eur. J. Biochem. 199:361-369 (1991).	
	FD	Marks et al. "By-passing immunization- Human antibodies from V-gene libraries displayed on phage" J. Mol. Biol. 222:581-597 (1991).	
	FE	Martynova et al. "Fabricating of plastic microfluid channels by imprinting methods" Anal. Chem. 69:4783-47-89 (1997).	
M	FF	Mauracher et al. Reduction of rubella ELISA background using heat denatured sample buffer. J. Immunol. Methods. 145:251-254, 1991.*	

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		Examiner Name	Nelson C. Yang
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Sheet	6	of	7

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
My	FG	Moore et al. "Peptide substrates and inhibitors of HIV-1 protease" Biochem. Biophys. Res. Com. 159:420-425 (1989).	
	FH	Mrsich et al., "Controlling cell attachment on contoured surfaces with self-assembled monolayers of alkanethiolates on gold," Proc. Natl. Acad. Sci. USA, 93:10775-10778 (1996).	
	FI	Nock et al. (1997). Reversible, site specific immobilization of polyarginine-tagged fusion protein on mica surfaces. FEBS Letters. 414:233-238.	
	FJ	Noren et al., "A general method for site-specific incorporation of unnatural amino acids into proteins," Science, 244:182-188 ((1989).	
	FK	Pale-Grosdemange et al. (1991). Formation of self-assembled monolayers by chemisorption of derivatives of oligo(ethylene glycol) of structure HS(CH ₂) ₁₁ (OCH ₂ CH ₂) _m OH on gold. J. Am. Chem. Soc. 113(1):12-20."	
	FL	Prime et al., "Self-assembled organic monolayers: model systems for studying absorption of proteins at surfaces," Science, 252:1164-1167 (1991).	
	FM	Roberts et al. "Rationale design of peptide-based HIV proteinase inhibitors" Science 248:358-361 (1990).	
	FN	Rowe et al. "Array biosensor for simultaneous identification of bacterial, viral and protein analytes" Anal. Chem. 71(17):3846-3852 (1999).	
	FO	Schock et al. "Mutational anatomy of an HIV-1 protease variant conferring cross-resistance to protease inhibitors in clinical trials" J. Biol. Chem. 271:31957-31963 (1996).	
	FP	Sigal et al. "A self-assembled monolayer for the binding and study of histidine-tagged proteins by surface plasmon resonance" Anal. Chem 68:490-497 (1996).	
	FQ	Sitzel et al. "Mass-sensing, multianalyte microarray immunoassay with imaging detection" Clin. Chem. 44(9):2038-2043 (1998).	
	FR	Singhvi et al., "Engineering cell shape and function," Science, 264:696-698 (1994).	
	FS	Skalka: Retroviral proteases: first glimpses at the anatomy of a processing machine Cell 56:911-913 (1989).	
	FT	Stennicke et al., "Biochemical characteristics of caspases-3, -6, -7, and -8," The Journal of Biological Chemistry, 272:25719-25723 (1997).	
	FU	Sundberg et al., "Spatially-addressable immobilization of macromolecules on solid supports," J. Am. Chem. Soc., 117:12050-12057 (1995).	
M	FV	Talanian et al., "Substrate specificities of caspase family proteases," The Journal of Biological Chemistry, 272:9677-9682 (1997).	

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M	FW	Thomberry, "Interleukin-1.beta. converting enzyme," Methods in Enzymology, 244:615-631 (1994).	
	FX	Villa et al., "Caspases and caspase inhibitors," TIBS, 22:388-393 (1997).	
	FY	Wagner et al., "omega.-functionalized self-assembled monolayers chemisorbed on ultraflat Au(111) surfaces for biological scanning probe microscopy in aqueous buffers," J. Vac. Sci. Technol. B, 14(2):1468-1471 (1996).	
	FZ	Wagner et al., "Bioreactive self-assembled monolayers on hydrogen-passivated Si(111) as a new class of atomically flat substrates for biological scanning probe microscopy," Journal of Structural Biology, 119:189-201 (1997).	
	GA	Wagner et al., "Covalent immobilization of native biomolecules onto Au(111) via N-hydroxysuccinimide ester functionalized self-assembled monolayers for scanning probe microscopy," Biophysical Journal, 70:2052-2066 (1996).	
	GB	Wagner et al., "Formation and in Situ modification of monolayers chemisorbed on ultraflat template-stripped gold surfaces," Langmuir, 11(10):3867-3875 (1995).	
	GC	Weiner et al. "Site-directed mutagenesis of double-stranded DNA by the polymerase chain reaction" Gene 151:119-123 (1994).	
	GD	Wilson et al., "Structure and mechanism of interleukin-1.beta. converting enzyme," Nature, 370:270-275 (1994).	
	GE	Wondrak et al. "Influence of flanking sequences on the dimer stability of human immunodeficiency virus type 1 protease" Biochemistry 35:12957-12962 (1996).	
M	GF	Wu et al. "Structural basis for specificity of retroviral proteases" Biochemistry 37:4518-4526 (1998).	
M	GG	Pham, et al. "Human Interleukin-2 Production in Insect (Trichoplusia ni) Larvae: Effects and Partial Control of Proteolysis", Biotechnology and Bioengineering vol. 62(2) pp. 175-182; Jan. 20, 1999.	

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